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10/565,116	01/17/2006	Jean Woloszko	A-22	6140

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EXAMINER

HUPCZEY, JR, RONALD JAMES

ART UNIT

PAPER NUMBER

3739

NOTIFICATION DATE

DELIVERY MODE

10/13/2010

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

intel\_prop@arthrocare.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/565,116	<b>Applicant(s)</b> WOLOSZKO ET AL.	
	<b>Examiner</b> RONALD HUPCZEY, JR	<b>Art Unit</b> 3739	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 01 June 2010.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-3, 6-18 and 20-60 is/are pending in the application.
- 4a) Of the above claim(s) 2, 3 and 41-56 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 6-18, 20-40 and 57-60 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 January 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                       | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>06/01/2010</u> .  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on June 1st, 2010 has been entered.

Applicant's amendments and remarks, received on June 1<sup>st</sup>, 2010, have been fully considered. Claims 1-3, 6-18 and 20-60 are currently pending with claims 2-3 and 41-56 being withdrawn, claims 4, 5 and 19 cancelled and claims 1, 10, 17, 20, 29, 35, 37 and 57 amended and claims 59-60 newly added. Applicant's amendment to claim 37 has obviated the previously filed rejection of the claim under 35 U.S.C. 112, 2<sup>nd</sup> paragraph. The following is a complete response to the June 1st, 2010 communication.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1, 4-9, 17-26, 28-30, 33-34 and 57-60 are rejected under 35 U.S.C. 102(e) as being anticipated by West (US Pat. Pub. 2003/0163126 A1).

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Regarding claim 1, West discloses an electrosurgical instrument for removing target tissue (see figures 5 and 6) comprising a shaft including a shaft distal end portion and a shaft proximal end portion (tubular member **54**), the shaft having a longitudinal void therein (see void define therein, figures 5 and 6), a tissue removal port disposed at the shaft distal end portion (opening **56**), an elongate rotating member comprising at least one leading edge (see edges on hollow shaver **58** in figures 5 and 6) housed longitudinally within the longitudinal void of the shaft (hollow shaver **58**) wherein the rotating member is capable of rotating within the shaft is coupled to a drive motor (via hollow drive shaft **60**, see paragraph [0055]) for driving rotation of the rotating member, a discrete active electrode (lead electrodes **64**) disposed on a portion of the tissue removal port perimeter (see figure 6, placement of the lead electrodes **64** along the a 1<sup>st</sup> portion of the perimeter of the opening **56**, additionally see the below figures 1A and 1B illustrating the Examiner interpretation of what constitutes the "perimeter") wherein the active electrode is capable of to electrosurgically removing at least a portion of the target tissue via molecular dissociation of target tissue components as the rotating member leading edge manipulates tissue toward the active electrode (leading edge as seen in figures 5 and 6 causing at least a portion of tissue to move closer to the leads **64**), an active electrode lead (lead wire **40** in analogous embodiment depicted in figure 4, see paragraph [0060]) extending proximally from the active electrode and disposed internal to the shaft distal end portion and a return electrode (tubular member **54** as in paragraph [0063] which is formed of metal and defines the entire perimeter at opening **56**) disposed at the instrument distal end on a second portion of the tissue removal port perimeter. It is further noted by the Examiner that the active electrode can also be interpreted as being the tubular member **54** as described in paragraph [0063] and the return

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electrode being at least one of the plurality of leads **64** since the claim has only set forth intended uses for each of the electrodes in terms of one being "active" and one being a "return" and has not linked each electrode to a source of energy providing such functionality.

Regarding claim 57, West discloses the return electrode to be disposed on the shaft distal end portion such that a distance between the active electrode and the return electrode is constant (lead electrodes **64** to be fixedly spaced from tubular member **54** portion which defines return electrode).

Regarding claim 58, West discloses the tissue removal port to have a curved shape (opening **56** with curved opening, see figures 5 and 6).

Regarding claims 6 and 7, West discloses an aspiration unit including an elongate aspiration lumen in communication distally with an aspiration port and for the aspiration port to be in fluid communication with the tissue removal port (continuous aspiration pathway communicating with a opening in hollow shaver **58** and opening **56**, see paragraph [0062]).

Regarding claim 8, West discloses the device to further comprise a coagulation electrode disposed at the instrument distal end (at least one of the lead electrodes **64**).

Regarding claim 9, West disclose the at least one of the active electrode (lead electrodes **64**) and the return electrode (tubular member **54** as defined above) to be capable of coagulating tissue or a blood vessel (see paragraphs [0043]-[0044] and [0057]).

Regarding claim 17, West discloses an electrosurgical instrument (see figures 5 and 6) for removing target tissue from a patient comprising a shaft including a shaft distal end portion and a shaft proximal end portion wherein the shaft defines a longitudinal void therein (tubular member **54** with void, see figures 5 and 6) and a tissue removal port disposed laterally on the shaft distal

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end and space proximally from the shaft distal end (opening **56** extending in a lateral direction as shown in figures 5 and 6 and spaced from the distal tip of the device by at least the thickness of the shaft **54** as shown in figures 5 and 6), an active electrode (lead electrodes **64**) disposed on a portion of the perimeter of the tissue removal port (see figure 6, placement of the lead electrodes along the a 1<sup>st</sup> portion of the perimeter of the opening **56**), a return electrode disposed on the shaft distal end portion and spaced from the active electrode (tubular sheath **54**, see paragraph [0063]) and wherein the return electrode is disposed on a second portion of the tissue removal port perimeter (tubular member **54** as in paragraph [0063] which is formed of metal and defines the entire perimeter at opening **56**), and a rotating member including a rotating distal end (hollow shaver **58**) housed longitudinally within the longitudinal void of the shaft wherein the rotating member is capable of rotating within the shaft (see figures 5 and 6) and wherein the rotating member distal end is capable of traversing the tissue removal port as the rotating member rotates within the shaft (hollow shaver **58** rotating as seen in figure 5 defines traversing the opening **56**) West further discloses the active electrode (lead electrodes **64**) capable of removing the target tissue as the rotating member distal end traverses the tissue removal port (see paragraphs [0043]-[0044] and [0057]). It is further noted by the Examiner that the active electrode can also be interpreted as being the tubular member **54** as described in paragraph [0063] and the return electrode being at least one of the plurality of leads **64** since the claim has only set forth intended uses for each of the electrodes in terms of one being "active" and one being a "return" and has not linked each electrode to a source of energy providing such functionality.

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Regarding claim 18, West discloses the active electrode to be disposed on an external surface of the shaft distal end portion at a location adjacent to the tissue removal port (leading electrodes **64** in vicinity of opening **56**).

Regarding claim 20, West discloses the second portion of the perimeter is spaced from the first portion of the perimeter (first portion of the perimeter being considered adjacent to the lead electrodes **64** and second portion of the perimeter being located across the port **56**).

Regarding claim 21, West discloses the active electrode (lead electrodes **64**) to form a discrete electrode coupled to an active electrode lead (lead wire **40** in analogous embodiment depicted in figure 4, see paragraph [0060] wherein the active electrode lead extends proximally within the shaft and the active electrode lead is capable of coupling the active electrode to an electrosurgical generator (inherent to provide the disclosed electrosurgical ability).

Regarding claim 22, West discloses at least a portion of the shaft to be encased within an electrically insulating layer (insulating sheath **66**) and for the active electrode to comprise an exposed, non- insulated region of the shaft (lead electrodes **64**).

Regarding claim 23, West discloses the rotating member has a leading edge (see edges on hollow shaver **58** in figures 5 and 6) to manipulate the target tissue towards the active electrode as the rotating member leading edge traverses the tissue removal port (hollow shaver **58** directing at least a portion of tissue toward lead electrodes **64**).

Regarding claim 24, West discloses the active electrode to be capable of electrosurgically removing at least a portion of the target tissue via molecular dissociation of target tissue components as the target tissue is manipulated towards the active electrode (see paragraphs [0043]-[0044] and [0057]).

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Regarding claim 25, West discloses the rotating member distal end to include a leading edge capable of guiding the target tissue towards the active electrode (serrated edge, curved distal portion of hollow shaver **58**, see figures 5 and 6). West further discloses the electrodes to functioning as the conducting portions of the device and does not disclose the at least the leading edge of the rotating member to conduct any electrical energy. As such, West shows that at least the leading edge of the rotating member distal end is electrically non-conducting.

Regarding claim 26, West discloses the rotating member distal end to be capable of providing friction between the rotating member and the target tissue (by cutting/abrading, see at least paragraphs [0056], [0062]).

Regarding claim 28, West discloses the device to further comprise a coagulation electrode disposed at the distal tip of the shaft (at least one of the plurality of lead electrodes **64**).

Regarding claim 29, West discloses an electrosurgical system for treating a target tissue (see figures 5 and 6) comprising an instrument which comprises a shaft including a shaft distal end portion and a shaft proximal end portion (tubular member **54** with void, see figures 5 and 6) wherein the shaft defines a longitudinal void therein, a tissue removal port at the shaft distal end portion (opening **56**), an elongate rotating member housed within the shaft and capable of rotating therein (hollow shaver **54**) wherein the rotating member has a distal end which traverses the tissue removal port as the rotating member rotates within the shaft (hollow shaver **58** rotating as seen in figure 5 defines traversing the opening **56**), an active electrode disposed along a portion of a perimeter of the tissue removal port (see figure 6, placement of the lead electrodes along the perimeter of the opening **56**) wherein the active electrode is capable of electrosurgically removing a portion of the target tissue during each revolution of the rotating



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member (see paragraphs [0043]-[0044] and [0057]) and a return electrode disposed at the instrument distal end on a second portion of the tissue removal port perimeter (tubular member **54** as in paragraph [0063] which is formed of metal and defines the entire perimeter at opening **56**) and an electrosurgical generator coupled to the instrument for applying a high frequency voltage between the active electrode and the return electrode (inherently coupled given the functionality disclosed in [0053], [0063], claim 8 and claim 9) wherein the active electrode is capable of electrosurgically removing at least a portion of the target tissue upon application of the high frequency voltage (see paragraphs [0043]-[0044] and [0057]). It is further noted by the Examiner that the active electrode can also be interpreted as being the tubular member **54** as described in paragraph [0063] and the return electrode being at least one of the plurality of leads **64** since the claim has only set forth intended uses for each of the electrodes in terms of one being "active" and one being a "return" and has not linked each electrode to a source of energy providing such functionality.

Regarding claim 30, West discloses the rotating member comprises a leading edge wherein the leading edge is capable of manipulating the target tissue towards the active electrode as the rotating member leading edge traverses the tissue removal port (hollow shaver **58** having a leading edge as in figures 5 and 6 and directing at least a portion of tissue toward lead electrodes **64**).

Regarding claim 33, West discloses the return electrode to be affixed to an external surface of the shaft distal end portion at a location adjacent to the tissue removal port (in view of the above alternate notation of claim 29 where the return in the lead electrodes **64** and the active

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is the shaft **54** in view of paragraph [0063], the electrodes **64** are affixed to an external surface adjacent the port **56**).

Regarding claim 34, West discloses that at least a distal portion of the rotating member has an arcuate cross-sectional shape (see distal end of hollow shaver **58**).

Regarding claim 59, West discloses an electrosurgical instrument for removing target tissue comprising a shaft (tubular member **54**) having a shaft distal end portion and a shaft proximal end portion (see figures 5 and 6), the shaft having a longitudinal void therein (void with member **54**) and a tissue removal port disposed at the shaft distal end portion (opening **56**), a discrete active electrode (lead electrodes **64**) disposed on a portion of the perimeter of the tissue removal port (see figure 6, placement of the lead electrodes **64** along the a 1<sup>st</sup> portion of the perimeter of the opening **56**, additionally see the below figures 1A and 1B illustrating the Examiner interpretation of what constitutes the "perimeter"), a return electrode (tubular member **54** as in paragraph [0063] which is formed of metal and defines the entire perimeter at opening **56**) disposed on the shaft and spaced apart from the active electrode (spacing of **64** from shaft **54**) wherein the return electrode has a larger exposed surface area than the active electrode (surface area of **54** in contrast to one of the leads **64**), an elongate rotating member comprising at least one leading edge (hollow shaver **58** with edges thereon) and housed longitudinally within the longitudinal void of the shaft (see figures 5 and 6), the rotating member comprising a rotating member distal end configured to traverse the tissue removal port as the rotating member rotates within the shaft (see distal end of shave **58** which traverses port **56**), and wherein the active electrode is capable of being operating to electrosurgically remove at least a portion of the target tissue via molecular dissociation of target tissue components as the rotating member leading

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edge manipulates tissue toward the active electrode (leading edge as seen in figures 5 and 6 causing at least a portion of tissue to move closer to the leads **64**).

Regarding claim 60, West discloses that the shaft distal end portion has a jaw bone shape (see the U-shaped opening formed by the port **56** as the distal end of shaft **54**).

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

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7. Claims 10, 12, 15-16, 35-37 and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over West (US Pat. Pub. 2003/0163126 A1) in view of Peters (US Pat. Pub. 2002/0038122 A1).

Regarding claims 10, 35 and 36, West discloses a method for the controlled removal of a target tissue at a surgical site comprising the steps of providing an electrosurgical instrument (see figures 5 and 6), the instrument including a shaft (tubular member **54**) having a shaft distal end portion, a tissue removal port (opening **56**) disposed at the shaft distal end portion, an elongate rotating member (hollow shaver **58**) housed longitudinally within the shaft wherein the rotating member has at least one leading edge (see edges of shaver **58** in figures 5 and 6) and is capable of rotating within the shaft, a discrete active electrode (lead electrodes **64**) disposed along a portion of the perimeter of the tissue removal port (see figure 6, placement of the lead electrodes along the perimeter of the opening **56**), an active electrode lead (lead wire **40** in analogous embodiment depicted in figure 4, see paragraph [0060]) extending proximally from the active electrode and disposed internal to the shaft distal end portion and a return electrode disposed at the instrument distal end on a second portion of the tissue removal port perimeter (tubular member **54** as in paragraph [0063] which is formed of metal and defines the entire perimeter at opening **56**), positioning the instrument distal end with respect to the target tissue such that the tissue removal port lies in at least close proximity to the target tissue (see paragraphs [0022] and [0056]), rotatively driving the rotating member via a drive motor such that the rotating member rotates within the shaft thereby repeatedly traversing the tissue removal port to manipulate target tissue toward the active electrode (see paragraph [0055] and figures 5 and 6, leading edge as seen in figures 5 and 6 causing at least a portion of tissue to move closer to the leads **64**) and applying

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a high frequency voltage between the active electrode and the return electrode (see paragraph [0057] and [0059]) wherein the active electrode is capable electrosurgically removing the target tissue via molecular dissociation of target tissue components as the rotating member rotates within the shaft whereby the target tissue is sequentially removed as the rotating member distal end repeatedly traverses the tissue removal port (see paragraph [0055] and figures 5 and 6).

While West discloses the selective activation of the driving and the high frequency voltage, West fails to specifically recite the simultaneous supply of high frequency voltage during the driving step. Peters discloses a similar electrosurgical instrument which provides for both a mechanical and electrosurgical treatment means. Peters additionally discloses the positioning of the device near a surgical site, the rotating of an elongate member and the application of a high frequency voltage during the rotation of the elongate member (see claim 29 and paragraph [0036]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the simultaneous activation of the high frequency voltage and the driving in order to effectuate both treatments at the same time. The simultaneous treatment allows for the user to reduce the amount of blood build-up in the surgical site by the application of the electrosurgical energy while mechanically cutting a desired a portion of tissue thereby ensuring the user is capable of clearly seeing the surgical site. Additionally, the device of West, allowing for the selective activation of both treatments, is readily useable in the combined methodology above.

Regarding claims 12 and 39, West discloses the target tissue to comprise articular cartilage, meniscal cartilage, a ligament, or a tendon (see paragraph [0056]).

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Regarding claim 15, West in view of the above rejection of claim 10 discloses that during the driving and applying steps for there to be an additional step of manipulating the instrument such that the tissue removal port is translated with respect to the target tissue (see at least paragraphs [0022] and [0056]).

Regarding claim 16, West in view of the above rejection of claim 10 discloses the driving and applying steps generate fragments of resected tissue and gaseous ablation by-products (see at least paragraphs [0022], [0056] and [0057]) and for the method to further comprises the additional step of aspirating the fragments of resected tissue and gaseous ablation by-products via an aspiration unit, wherein the aspiration unit is integral with the instrument (see paragraphs [0022],[0056] and [0057]; continuous aspiration pathway communicating with a opening in hollow shaver **58** and opening **56**, see paragraph [0062]).

Regarding claim 37, West and Peters in view of the above rejection of claim 35 discloses the rotating member distal end to include a leading edge which traverses the tissue removal port as the rotating member rotates within the shaft (serrated edge, curved distal portion of hollow shaver **58**, see figures 5 and 6). While West and Peters fail to specifically discloses that during the simultaneous driving and applying steps the active electrode functions remove the target tissue as the leading edge traverses the tissue removal port, it would have been obvious to one of ordinary skill in the art at the time the invention was made that the active electrode, would come into contact with at least a portion of the target tissue while the elongate member is traversing the tissue removal port and the device is being positioned at the target site. It is the examiner's position that during such contact, at least a portion of tissue would be treated and removed due to

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the contact with the active electrode and the aspiration through the lumen, tissue removal port and plurality of other aspiration ports within the device of West.

8. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over West (US Pat. Pub. 2003/0163126 A1) in view of Peters (US Pat. Pub. 2002/0038122 A1) as applied to claim 10 above, and further in view of Bonnell et al (US Pat. 4,203,444).

Regarding claim 11, West and Peters fails to disclose the positioning at the target site to comprise positioning the shaft distal end portion at or within a synovial joint of the patient. Bonnell discloses a similar device to that of West and Peters and discloses for the device to be inserted to a treatment site which specifically consists of a synovial joint of the patient (see col. 1; 63 – col. 2; 26). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to insert the combined device of West and Peters into the synovial joint of a patient in order to provide for a minimally invasive method of treating/removing target tissue therein. Such treatment of a synovial joint, as evidenced by Bonnell reduces the healing time, trauma and chance of complication experienced with normal open methods of surgery.

9. Claims 13 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over West (US Pat. Pub. 2003/0163126 A1) in view of Peters (US Pat. Pub. 2002/0038122 A1) as applied to claims 10 and 35 respectively above, and further in view of Woloszko et al (US Pat. Pub. 2001/0025177 A1).

Regarding claims 13 and 40, West and Peters fail to specifically recite the high frequency voltage applied to being the range of from about 200 volts RMS to 1500 volts RMS. Woloszko discloses a similar electrosurgical device functioning to provide the treatment of a target portion of tissue via the application of high frequency voltage. Woloszko further disclose the voltage to

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be applied within a range of 5 to 1000 volts RMS. While not specifically reciting the complete claimed range of 200 to 1500 volts RMS, it would have been obvious to one having ordinary skill in the art at the time the invention was made to supply high frequency voltage within such a range since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233. Additionally, applicant has failed to set forth any criticality or unexpected result which would render such an operating range as a non-obvious variant.

10. Claims 14 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over West (US Pat. Pub. 2003/0163126 A1) in view of Peters (US Pat. Pub. 2002/0038122 A1) as applied to claims 10 and 35 respectively above, and further in view of Miller (US Pat. No. 5,423,844).

Regarding claims 14 and 38, West and Peters fail to specifically recite the driving to comprise rotating the rotating member at a speed in the range of from about 20 rpm to 90 rpm. Miller discloses a similar device to that of West and Peters and further discloses the device to drive the rotating elongate member in a range from 60 rpm to 2000 rpm (see col. 6; 19-31). While not specifically reciting the complete claimed range of 20 rpm to 90 rpm, it would have been obvious to one having ordinary skill in the art at the time the invention was made to drive the elongate member within such a range since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233. Additionally, applicant has failed to set forth any criticality or unexpected result which would render such an operating range as a non-obvious variant.



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11. Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over West (US Pat. Pub. 2003/0163126 A1) as applied to claim 17 above, and further in view of Miller (US Pat. No. 5,423,844).

Regarding claims 27, West discloses the rotating member to be coupled to a drive motor for driving rotation of the rotating member within the shaft at a speed in the range of from about 20 rpm to 90 rpm. Miller discloses a similar device to that of West and further discloses the device to drive the rotating elongate member in a range from 60 rpm to 2000 rpm (see col. 6; 19-31). While not specifically reciting the complete claimed range of 20 rpm to 90 rpm, it would have been obvious to one having ordinary skill in the art at the time the invention was made to drive the elongate member within such a range since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233. Additionally, applicant has failed to set forth any criticality or unexpected result which would render such an operating range as a non-obvious variant.

12. Claims 31 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over West (US Pat. Pub. 2003/0163126 A1) as applied to claim 29 above, and further in view of Savage et al (US Pat. No. 6,032,673).

Regarding claim 31, West fails to specifically disclose for the rotating member to be coupled to the drive motor via a flexible transmission line for driving rotation of the rotating member within the shaft. Savage discloses a similar electrosurgical device for treating a target portion of tissue. Savage further discloses a drive motor (drive motor **348**) to be couple to rotating portion by a flexible transmission line (flex drive input **336**, see col. 20; 47 - col. 21; 2).

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Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the flexible transmission line as that of Savage to interconnect the drive motor and elongate member of West. Such a provision of a flexible drive line allows for drive motor to be located remote from the device thereby reducing the size of the instrument and increasing the maneuverability of the device by the user.

Regarding claim 32, both West and Savage (drive motor **348**, power unit **346**) disclose the claimed invention except for the drive motor to be integral with the electrosurgical generator. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to integrate the drive motor and the electrosurgical generator into one electrical assembly, since it has been held that forming in one piece an article which has formerly been formed in two pieces and put together involves only routine skill in the art. *Howard v. Detroit Stove Works*, 150 U.S. 164 (1893). Additionally, it is well known in the art to integrate a plurality of sources and drives (i.e. ultrasonic, fluid, vacuum) with an electrosurgical generator to provide for a combined unit for connecting with a multi-functional instrument.

### ***Response to Arguments***

13. Applicant's arguments filed June 1<sup>st</sup>, 2010 have been fully considered but they are not persuasive.

In response to Applicant's argument on pages 14-17 of the Remarks that West fails to provide for an active electrode and a return electrode both disposed on a portion of the tissue removal port perimeter, the Examiner respectfully disagrees. The independent claims in one form or another require an active electrode on a portion of the tissue removal port perimeter and a return electrode on a second portion of the tissue removal port perimeter. It is first noted that the

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tissue removal port is being taken as the port **56** as shown in figures 5 and 6. Additionally, the annotated figures below shown the extent of the shaft **54** that the Examiner is taking as being encompassed by the port. It is additionally noted that while applicant recites "a portion" and "a second portion", nowhere does the claim require that these portions be different or separate or non-overlapping. In the instant case, the shaft **54** is being taken as the return electrode since, as disclosed in paragraph [0063], it can have that function and be formed of metal. Since the shaft **54** is what forms the opening at port **56**, it indeed encompasses the entirety of both the inner and outer perimeters defined at the port **56** and can positively be indentified as "on the port" or "on the port perimeter" since it is what forms the port. As can be seen in figures 5 and 6, the active leads **64** are disposed on a portion of the outer perimeter of the shaft **54** in the area encompassing the tissue removal port thereby effectively being on a "second portion of the tissue removal port perimeter". It is for at least this reasoning and interpretation of the West reference that the Examiner believes the above proffered rejections remain tenable. Applicant is invited to contact the Examiner to discuss the instant rejections and interpretation in the instance that the Examiner's position is not clear.

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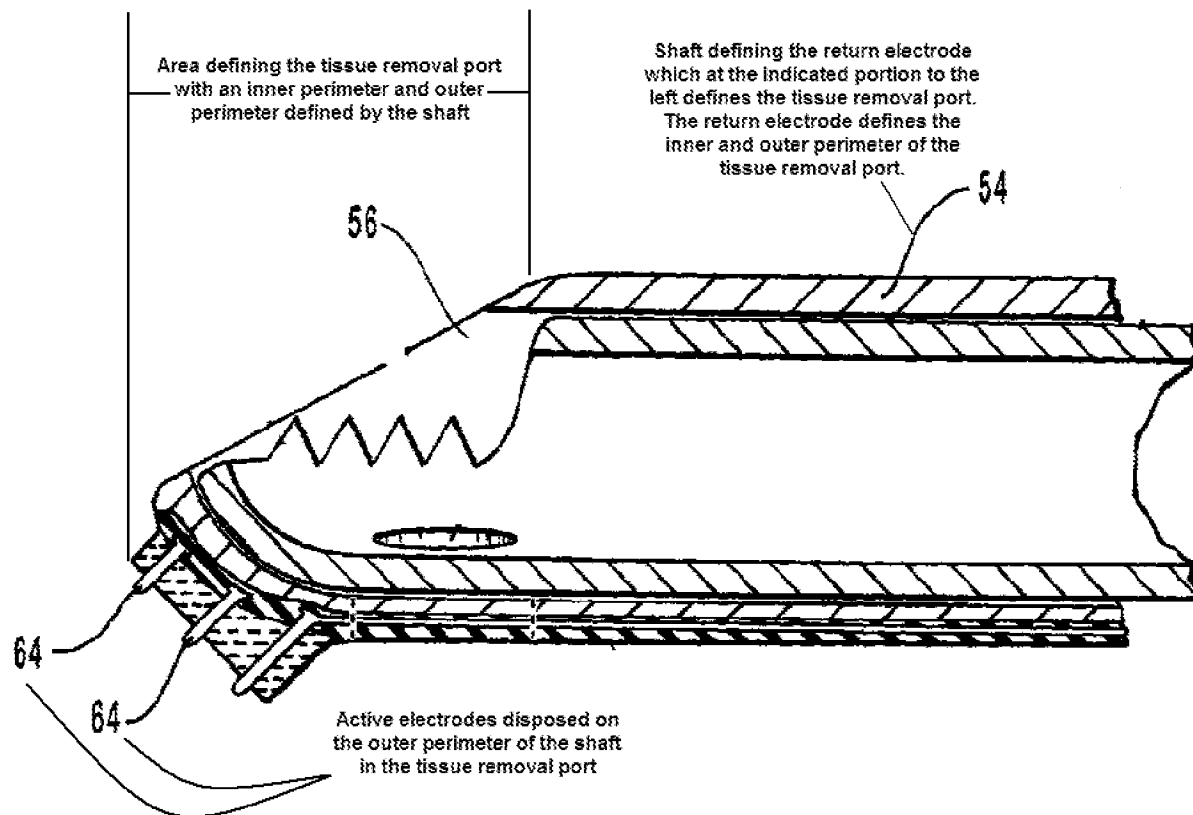


Figure 1A

### *Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to RONALD HUPCZEY, JR whose telephone number is (571)270-5534. The examiner can normally be reached on Monday - Friday, 9 A.M. to 5 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Linda Dvorak can be reached on 571-272-4764. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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/Ronald J. Hupczey/  
Examiner, Art Unit 3739

/Michael Peffley/  
Primary Examiner, Art Unit 3739

RJH